

Managing long-term sickness absence

Policy conclusions

- Managing long-term work absence due to sickness continues to be extremely important in the EU-countries
- The complex multilevel interplay between numerous factors affecting sickness absence and subsequent return to work renders studying the effects of different measures methodologically challenging
- Standardizing definitions and indicators used across countries would be beneficial
- Impact assessment of policy changes should be carried out and planned from early on in the process
- Prevention of long-term work absence by planning and anticipating return to work in co-operation between different stakeholders is crucial

Authors:

Johanna Kausto
Specialized Researcher, PhD
Finnish Institute of Occupational Health (FIOH), Finland

Lars Leemann
Researcher, lic. phil.
National Institute for Health and Welfare (THL), Finland

INTRODUCTION

Managing long-term work absence due to sickness continues to be a priority of many EU-countries. Direct and indirect costs to organisations and companies are extremely high. These costs include sick pay, social insurance payments, costs of temporary and overtime work, costs of occupational health services, and negative effects on profitability, productivity, and quality of work. The methods that are used to calculate the costs vary across countries. However, a conservative estimate of the average cost of absenteeism to a nation is 2.2% of GDP¹.

Scientific evidence shows that timely return to work (RTW) both reduces expenses from sickness benefits and prevents permanent work disability. Moreover, long-term sickness absence (LTSA) predicts future absence from work, transition to disability pension, and mortality²⁻⁶. LTSA is also associated with future unemployment, financial difficulties, psychological and social problems, and social exclusion^{7,8}. On the other hand, there is evidence that in many health conditions staying active promotes recovery. Thus, both from economic and public health point of view, there is a necessity to manage LTSA. However, defining LTSA is not straightforward and definitions that are used vary. Sickness absence is commonly understood as absence from work that is attributed to sickness by the employee and employer⁹, whereas definitions of a long-term period vary from a period exceeding 20 days to 90 days or longer¹⁰. Statistics on sickness absence (short-term, long-term or average) most often originate from surveys or administrative (social insurance) databases. Cross-national surveys, e.g. the European Union Labour Force Survey (EU LFS) and the European Working Conditions Surveys (EWCS) allow comparisons of short-term or average sickness absence to an extent, but large differences in registering LTSA between (and even within) countries set limitations to direct comparisons^{1,11}. This task proved to be problematic even across Nordic countries¹².

PATTERNS IN SICKNESS ABSENCE

Keeping these limitations in mind, a cross-national comparison of average sickness absence across several countries is presented in Figure 1. This chart presents a common trend that is usually found regardless of the source of data: the level of sickness absence has been higher in the Nordic countries than in the EU-countries on average. Otherwise, the order of the countries varies somewhat from source to source. A trend found in many countries is a fluctuation of the level of sickness absence over the business cycle due to disciplining effects (i.e. sickness absence rates of the established workers being negatively associated with cyclical unemployment rates) or changes in labour force composition. This phenomenon has been found especially in Norway and Sweden. A Norwegian study¹³ concluded that the disciplining effect explained most of the cyclical changes in work absence.

BIBLIOGRAPHY

- 1) Eurofound (2010). Absence from work [Cited 13 June 2016]. Available at: http://www.eurofound.europa.eu/sites/default/files/ef_files/docs/ewco/tn0911039s.pdf.
- 2) Kivimäki M, Head J, Ferrie JE, et al. Sickness absence as a prognostic marker for common chronic conditions: analysis of mortality in the GAZEL study. *Occup Environ Med* 2008;65(12):820-6.
- 3) Vahtera J, Pentti J, Kivimäki M. Sickness absence as a predictor of mortality among male and female employees. *J Epidemiol Community Health* 2004;58(4):321-6.
- 4) Lund T, Kivimäki M, Labriola M et al. Using administrative sickness absence data as a marker of future disability pension: the prospective DREAM study of Danish private sector employees. *Occup Environ Med* 2008; 65(1):28-31.
- 5) Alexanderson K, Kivimäki M, Ferrie JE et al. Diagnosis-specific sick leave as a long-term predictor of disability pension: a 13-year follow-up of the GAZEL cohort study. *J Epidemiol Community Health* 2012;66(2):155-9.
- 6) Laaksonen M, He L, Pitkaniemi J. The durations of past sickness absences predict future absence episodes. *J Occup Environ Med* 2013;55(1):87-92.
- 7) Bryngelson A. Longterm sickness absence and social exclusion. *Scand J Public Health* 2009;37(8):839-45.
- 8) Wikman A, Wiberg M, Marklund S, Alexanderson K. Activities and sources of income after a period of longterm sick leave-a population-based prospective cohort study. *BMC Public Health* 2012;12:745.
- 9) Whitaker SC. The management of sickness absence. *Occup Environ Med* 2001;58(6):420-4.
- 10) Higgins A, O'Halloran P, Porter S. Management of long term sickness absence: a systematic realist review. *J Occup Rehabil* 2012;22(3):322-32.
- 11) Gimeno D, Bültmann U, Benavides FG et al. Cross-national comparisons of sickness absence systems and statistics: towards common indicators. *Eur J Public Health* 2014; 24(4) 663-66.
- 12) Sickness Absence in the Nordic Countries. NOSOSCO, Project group, Nordic Council of Ministers, NOMECSO-NOSOSCO, 2015.
- 13) Askildsen JE, Bratberg E, Nilsen OA. Unemployment, labor force composition and sickness absence: a panel data study. *Health Econ* 2005;14(11):1087-101.
- 14) Kelasto. The Social Insurance Institution of Finland (Kela) 2016.
- 15) Laaksonen M, Martikainen P, Rahkonen O, Lahelma E. Explanations for gender differences in sickness absence: evidence from middle-aged municipal employees from Finland. *Occup Environ Med* 2008;65(5):325-30.
- 16) Bekker MHJ, Rutte CG, van Rijswijk K. Sickness absence: A gender-focused review. *Psychol Health Med* 2009; 14(4):405-18.
- 17) Patton E, Johns G. Women's absenteeism in the popular press: Evidence for a gender-specific absence culture. *Hum Relat* 2007; 60(1):1579-1612.

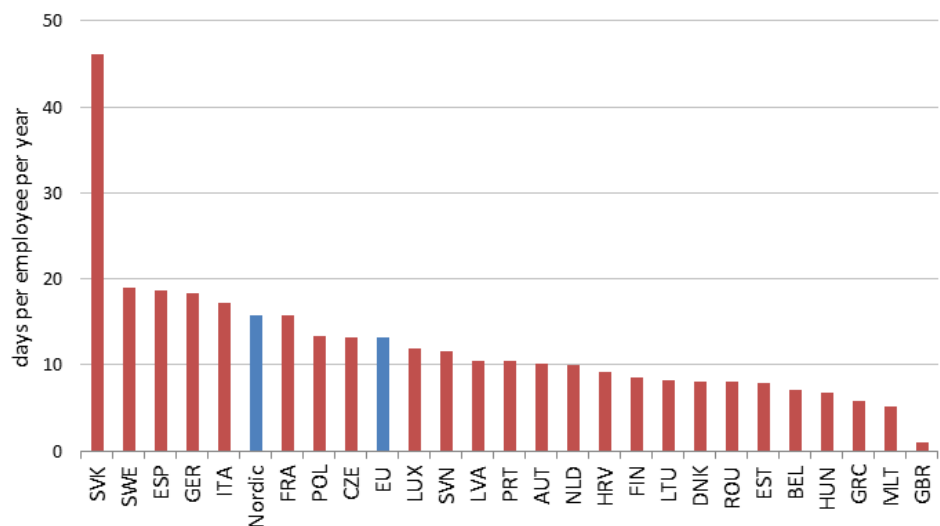


Figure 1. Absenteeism from work due to illness, days/employee/year, newest available data (various years). Source: European Health Information Gateway (WHO). (Accessed 4.8.2016).

Other patterns that are commonly seen in sickness absence are linked to gender, age and socioeconomic differences. In most Western countries, women account for a large part of sickness absence from work. In 2015, women accounted for 59% of sickness benefit periods compensated by the Social Insurance Institution of Finland (i.e. sick leaves lasting more than 10 days)¹⁴. The gender difference has been found to be largest in short, self-certified sickness absences. In a study among municipal employees in Finland women had a 1.5-fold risk for self-certified sickness absence compared to men¹⁵.

In addition to differences in morbidity between men and women, several explanations have been suggested for the female excess in sickness absence, e.g. gender segregation of the labour market¹⁶, the extent to which the social security system permits time off from work, or men and women facing different norms and social expectations at work places¹⁷. As for age, long-term sickness absence is generally more frequent among older than younger workers. This is most probably explained by differences in morbidity between these groups.

Sickness absence has consistently been shown to be higher in lower socioeconomic groups in different countries¹⁸⁻²⁰. Findings from Finnish and Swedish cohort studies^{20,21} suggest that exposure to physical work load and decreased level of work ability mainly account for the differences.

A COMPLEX PHENOMENON - FACTORS ASSOCIATED WITH SICKNESS ABSENCE AND RETURN TO WORK

As the patterns described above imply, sickness absence is a complex phenomenon with a multifactorial background. The factors related to sickness absence originate from three levels: 1) individuals, 2) organisations, groups and communities, and 3) societies. A meta-analysis examining prognostic factors for sickness absence²² found that being unmarried, experiencing psychosomatic complaints, using medication, and suffering from burnout or psychological problems (individual level factors), and having low job control, low decision latitude and experiencing unfairness at work (organisational level factors) were associated with work absence. Dekkers-Sanchez et al.²³ concluded in their systematic review that there is weak evidence that older age and history of sickness absence are associated with long-term work absence.

BIBLIOGRAPHY

- 18) Niedhammer I, Chastang JF, David S, Kelleher C. The contribution of occupational factors to social inequalities in health: findings from the national French SUMER survey. *Soc Sci Med* 2008;67(11):1870-81.
- 19) Christensen KB, Labriola M, Lund T, Kivimäki M. Explaining the social gradient in long-term sickness absence: a prospective study of Danish employees. *J Epidemiol Community Health* 2008; 62(2):181-3.
- 20) Laaksonen M, Piha K, Rahkonen O, Martikainen P, Lahelma E. Explaining occupational class differences in sickness absence: results from middle-aged municipal employees. *J Epidemiol Community Health* 2010;64(9):802-7.
- 21) Löve J, Holmgren K, Torén K, Hensing G. Can work ability explain the social gradient in sickness absence: a study of a general population in Sweden. *BMC Public Health* 2012;12:163.
- 22) Duijts SF, Kant I, Swaen GM, van den Brandt PA, Zeegers MP. A meta-analysis of observational studies identifies predictors of sickness absence. *J Clin Epidemiol* 2007; 60(11):1105-15.
- 23) Dekkers-Sánchez PM, Hoving JL, Sluiter JK, Frings-Dresen MH. Factors associated with long-term sick leave in sick-listed employees: a systematic review. *Occup Environ Med* 2008;65(3):153-7.
- 24) Heitz CA et al. Comparison of risk factors predicting return to work between patients with subacute and chronic non-specific low back pain: systematic review. *Eur Spine J* 2009;18(12):1829-35.
- 25) Cornelius LR, van der Klink JJ, Groothoff JW, Brouwer S. Prognostic factors of long-term disability due to mental disorders: a systematic review. *J Occup Rehabil* 2011;21(2):259-74.
- 26) Anema JR et al. Can Cross Country Differences in Return-to-Work After Chronic Occupational Back Pain be Explained? An Exploratory Analysis on Disability Policies in a Six Country Cohort Study. *J Occup Rehabil* 2009;19:419-26.
- 27) Holstila A, Rahkonen O, Lahelma E, Lahti J. Changes in Leisure-Time Physical Activity and Subsequent Sickness Absence Due to Any Cause, Musculoskeletal and Mental Causes. *J Phys Act Health* 2016, [Epub ahead of print].
- 28) Lahti J, Lahelma E, Rahkonen O. Changes in leisure-time physical activity and subsequent sickness absence: A prospective cohort study among middle-aged employees. *Prev Med* 2012; 55(6):618-22.
- 29) Kausto J, Solovieva S, Virta LJ, Viikari-Juntura E. Partial sick leave associated with disability pension: propensity score approach in a register-based cohort study. *BMJ Open* 2012;2(6).
- 30) Andrén D, Svensson M. Part-time sick leave as a treatment method for individuals with musculoskeletal disorders. *J Occup Rehabil* 2012;22(3):418-26.
- 31) Markussen S, Mykletun A, Røed K. The case for presenteeism - Evidence from Norway's sickness insurance program. *J Public Econ* 2012;96(11/12):959-72.
- 32) Kausto J, Viikari-Juntura E, Virta LJ, Gould R, Koskinen A, Solovieva S. Effectiveness of new legislation on partial sickness benefit on work participation: a quasi-experiment in Finland. *BMJ Open* 2014;4(12).

Determinants of return to work after sickness absence are overlapping but not identical with predictors of sickness absence. A large number of original studies and systematic reviews^{24,25} have been carried out. A wide range of potential prognostic factors have been suggested: e.g. age of the individual, gender, severity of the health problem and expectations of recovery. However, robust conclusions are often hampered by the heterogeneity of the studies.

A part of the cross-national differences in sickness absence behaviour can be explained by differences in national social, health and employment policies as well as structures, administration, and financing of these institutional areas. Features such as the compensation level, job protection, receiving no compensation during initial days of sickness, and conditions for eligibility for benefits are generally considered as influential²⁶. However, mainly due to methodological challenges, scientific population-level evidence on these associations is scarce.

INTERVENTIONS FOR MANAGING LTSA

Since causes for and factors associated with LTSA are utterly diverse and located on various levels, also responses to manage and reduce LTSA are equally multifaceted. Interventions are sometimes loosely categorised from varying perspectives, e.g. level on which interventions happen (individual, organisational, and societal level), along the main target groups of interventions (e.g. employee- or employer-oriented measures, and administrative-organisational measures), timing of the intervention (i.e. primary, secondary, and tertiary interventions), or general type of the intervention (e.g. clinical vs. modification of work conditions).

A literature review spanning from 1950 to 2011 attempted to take account of the complexity of interventions in managing LTSA as well as contextual factors. It identified four dominant programme theories underpinning interventions: early intervention, proactive use of organisational procedures, communication and cooperation between stakeholders, and multidisciplinary workplace-based occupational rehabilitation¹⁰. The authors concluded that the evidence base for assessing the effectiveness of these strains of interventions in managing and reducing LTSA remained inconsistent and incomplete with the exception of workplace-based occupational rehabilitation and modified duties, which were deemed effective at least for certain diseases, particularly musculoskeletal disorders.

While it is methodologically hazardous to directly compare single interventions in order to assess their effectiveness, larger-scale developments in managing LTSA can be observed. During the recent years, broader trends in managing LTSA have emerged. They tend to cluster around control, health promotion, and flexibility^{1,12}.

Control: In order to reduce LTSA related costs, many European countries revised their social security system in the direction to restrict access to benefits, increase surveillance of benefit claimants and recipients, and reduce benefit levels to increase incentives to work. A common example for this approach is the introduction or extension of waiting days (i.e. suspension of entitlement during initial days of sickness). This tendency to increased control is particularly pronounced in Eastern European countries, but not exclusive to them. However, concerns that excessive use of such measures could cause forced presenteeism have been expressed^{1,12}.

Health promotion: In a number of European countries promotion of workplace health and well-being has been increasingly emphasised. Several countries have seen the introduction of occupational health care acts and workplace health development programmes. Such systematic efforts to improve em-

Project: Cost-effectiveness of policies aimed at prolonging working careers - the role of health (EU-HEMP)

EU-HEMP is an EU-funded project studying the impact of health in increasing employment rate and labour market participation. This series of policy briefs is produced as part of the project.

The principal objectives of the project are the following:

1) Producing and gathering evidence on the cost-effectiveness of strategies aimed at reintegration of disabled people, people on sickness leave and long-term unemployed people into the labour market and policies aimed at prolonging careers of near-retirement people. In short, we study the role of health in increasing employment.

2) Policy recommendations for the design of more cost-effective social policies will be made based on data analyses, comparative policy analysis and review of best practices.

3) Creation of an international expert network in the field of rehabilitation, reintegration, disability and health policies in connection with labour markets and focusing on the cost-effectiveness of these policies.

Link to the website

The project is funded by the European Commission (agreement no. VS/2014/0174) together with the National Institute for Health and Welfare.

National Institute for Health and Welfare
PI 30 (Mannerheimintie 166)
00271 Helsinki
Puhelin: 029 524 6000

ISBN 978-952-302-795-4 (on-line)
ISSN 2323-5179

<http://urn.fi/URN:ISBN:978-952-302-795-4>

www.thl.fi

employee health may be located at a national or company level and in some cases involve wider stakeholders such as e.g. trade unions. Special attention is usually paid to prevention, optimising working conditions, and general health improvement. Recent studies^{27,28} showed beneficial impacts of increased physical activity on subsequent LTSA and suggested encouraging employees to engage in physical activity. Organisations may facilitate physical activity during working hours or leisure-time e.g. by providing sports facilities, distributing exercise vouchers, or encourage commuter cycling. This approach is especially common among Northern European countries from where it has spread to other countries^{1,12}.

Flexibility: There has been a trend towards a better planned and flexible RTW. For example, some countries adopted policies to support such efforts with adequate legislation providing more flexible combining of part-time work with part-time use of social security benefits. Research evidence from the Nordic countries²⁹⁻³² showed beneficial effects of the use of partial sick leave on subsequent RTW, work participation and employment.

CONCLUSIONS AND RECOMMENDATIONS

In line with the other policy briefs published in the EU-HEMP project it can be claimed that the empirical evidence base for managing LTSA is still meagre. The cost-effectiveness of different policy measures has been rarely evaluated. As pointed out, varying research designs, methodological shortcomings and disparate measures further limit the feasibility for evidence based recommendations. Particularly cross-national comparisons suffer from the lack of standardized definitions and indicators, and inconsistency of available data. In addition, distinct contextual factors in which studies are embedded limit the generalisability of results. Furthermore, the large variety of incomparable diseases indicating different measures renders the findings fragmented and distributed unevenly to different groups of diseases. For example, managing LTSA in mental disorders needs further investigation.

However, some consensus exists on the importance of

- The use of early interventions (early referral to health services, early contact by the employer, early RTW),
- Engaging organisations (implementing and maintaining consistent and transparent sickness absence policies),
- Communication and cooperation between stakeholders such as employees, employers, managers, community physicians, general practitioners and occupational health care, and
- Multidisciplinary workplace-based occupational rehabilitation (e.g. modifying working hours and duties).

It is undisputed that workplaces have a key role in managing LTSA. Thus, policies should aim at providing an institutional and legal framework facilitating organisations to implement and follow these recommendations. On the other hand, policies should aim at general promotion of workplace health and well-being. Campaigns to improve employee health may be located at a national or company level. The tax exemption of exercise vouchers may serve as an example for policies combining the two levels. Last but not least, new, innovative approaches in working with organisations in managing LTSA have been called for.